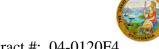
#### **DEPARTMENT OF TRANSPORTATION**

DIVISION OF ENGINEERING SERVICES Office of Structural Materials Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 1.28

## WELDING INSPECTION REPORT

Resident Engineer: Casey, William **Report No:** WIR-028190 Address: 333 Burma Road **Date Inspected:** 16-Aug-2012

City: Oakland, CA 94607

**OSM Arrival Time:** 700 **Project Name:** SAS Superstructure **OSM Departure Time:** 1730 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: American Bridge/Fluor Enterprises, a JV **Location:** S.A.S. Job site

**CWI Name:** Listed below **CWI Present:** Yes No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A **Electrode to specification:** Yes No Weld Procedures Followed: Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes No N/A **Approved Drawings:** Yes No **Approved WPS: Delayed / Cancelled:** Yes No N/A

34-0006 **Bridge No: Component:** S.A.S. Structure

### **Summary of Items Observed:**

The Caltrans Quality Assurance Inspector (QAI), Scott Croff, was present at the Self Anchored Span (SAS) job site to observe the scheduled fabrication and welding of components for the SFOBB project.

The QAI was present at the Tower base and the following observations were made: At Electro-Slag weld G (S-045), repair welding is in progress. The QAI noted that Gas shielded Flux Cored Arc Welding (FCAW-G) is being used to make the vertical (3G) complete joint penetration (CJP) weld repair. The QAI noted that the ESW weld has been removed earlier, at approximately Y=2470mm - 3100mm. The repair welding was in progress during earlier shifts and the QAI was informed that there is a weld repair request (RWR) # 201208-003 for this repair. The QAI reviewed the documents and noted that the repair is being performed on face A and the welding procedure specified in the RWR is shielded metal arc welding (SMAW) not FCAW-G. The QAI discussed this with the QAI William Clifford and was informed that a non-conforming incident report has been written for this occurrence.

The QAI noted that James Zhen, ID 6001, is operating the semi-automatic FCAW-G welding machine. The QAI made observations of the welding parameters, travel speed and interpass temperature of the welding in progress. The QAI noted that the welding was within the ranges listed in welding procedure specification (WPS) ABF-WPS-D15-3000-3-repair. The QAI noted that the repair weld was completed and a preliminary visual examination identified several areas of unacceptable weld profiles that need additional welding / grinding. This work was in progress when the QAI was assigned other tasks. See the attached photos.

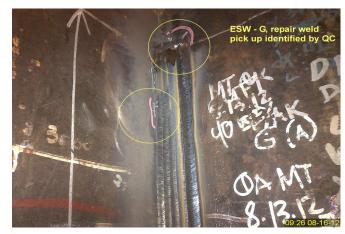
The QAI reviewed contract documents at pier 7. The QAI used approved weekly welding report submittals and

## WELDING INSPECTION REPORT

(Continued Page 2 of 2)

cross referenced the welding and inspection status as reported with QA records to identify the overall weld status. The QAI completed reviewing the welding report package 123, for weekly welding reports prior to formal submittal by the contractor. The QAI met with the QCI William Norris and discussed the weekly welding report package and the locations of some reported welds. The QAI and the QCI had not received a current weld tracking list and were informed of the placement of the welds in the structure, as reported. The QAI relayed that there were no other issues identified in the review. The QAI continued filing the welding report submittals that were reviewed during the previous week. This work was in progress until the end of the shift.





# **Summary of Conversations:**

The QAI had conversations with the QCI personnel, ABF workers and other QAI regarding the repair work in progress. The QAI relayed the status of the welding observed to the QAI Danny Reyes and the QAI Lead Bill Levell. The QAI also relayed the status of the document reviews to the QAI Lead Bill Levell. Except as described above, there were no other notable conversations.

#### **Comments**

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Nina Choy, (510) 385-5910, who represents the Office of Structural Materials for your project.

| Inspected By: | Croff,Scott | Quality Assurance Inspector |
|---------------|-------------|-----------------------------|
| Reviewed By:  | Levell,Bill | QA Reviewer                 |